Abstract

Energy consumption meter arrangement

An energy consumption meter arrangement is specified which 5 has two inputs (1, 2), to which signals are fed which are dependent on an electrical voltage (V) and an electrical current (I). These signals are digitized in analog-todigital converters (3, 4) and combined with one another. In order to correct phase differences which may be caused by 10 means for coupling-in the signals (12, 14), a phase evaluation block (9) is coupled to the inputs (1, 2) of the energy consumption meter arrangement. The phase evaluation block (9) drives a phase correction block (6) at the output of an analog-to-digital converter (4). As a result, cost-15 effective compensation of phase errors is possible with little complexity, which makes DC isolation possible at the input whilst avoiding measurement errors. The described energy consumption meter arrangement is particularly suitable for implementation using integrated circuit 20 technology.

Figure